

Bulgarian Energy Holding EAD

The revision of the Outlook to Positive is driven by the potential improvement of Bulgarian Energy Holdings EAD's (BEH) Standalone Credit Profile (SCP), which is 'bb'.

Fitch Ratings expects the company's business profile to improve thanks to growing earnings from network businesses following investments, and rising profitability supported by progressing liberalisation, which enables the company to sell all energy generated at market prices. We also expect low leverage to persist during the forecast horizon.

The Long-Term IDR continues to reflect a one-notch uplift to reflect government support (Bulgaria is rated BBB/Positive), based on our government-related entities (GRE) rating criteria.

Key Rating Drivers

SCP on Improving Trend: We expect BEH's EBITDA from regulated gas and electricity transmission and transit to increase under the rating case, rising to an average of 40% of total EBITDA over 2024-2027 from 20% in 2021-2022. The latter was particularly low, mostly due to high prices inflating the generation business results.

The almost-completed liberalisation of the Bulgarian energy market and its full integration with neighbouring countries should support BEH's profitability, since the company has occasionally been penalised by the regulated tariffs set for its generation.

Benefits of Liberalisation: The entire energy production volume of BEH's generators will be sold on the free market from July 2024. As a result, we expect better performance of the Kozloduy nuclear power plant (NPP Kozloduy), which was previously selling 25% of its production at unfavourable regulated prices.

From July 2024, the subsidiary NEK will no longer act as a public supplier. Instead, it will focus its operations on electricity generation from hydro power plants, which should translate into more predictable results. We assess these developments as credit positive, as free market transactions are more transparent and not prone to government interference.

Low Leverage: We expect BEH to maintain a strong financial profile in 2024-2027 with funds from operations (FFO) net leverage at 1.8x on average, and solid FFO interest coverage following its decreasing debt burden. This is based on our expectations of average annual consolidated capex of close to BGN1 billion and a 100% dividend payout ratio from BEH's consolidated accounts from 2024.

Financial Results Stabilisation: After an extraordinarily strong 2022 performance, EBITDA receded in 2023 to BGN2.3 billion, mainly due to lower electricity demand and declining energy prices, and as a result of growing production from renewables.

These trends had a negative effect on the financial results of BEH's thermal power plant (TPP Maritsa East 2), while price caps upheld for 2023 – with some reduction from July 2023 – limited the performance of NPP Kozloduy. We expect weak performance from the mining segment following the considerably lower volumes sold to power plants located in Maritsa-East basin.

Ratings

Long-Term IDR	BB+
Long-Term Local-Currency IDR	BB+
Senior Unsecured Debt - Long-Term Rating	BB+

Outlooks

Long-Term Foreign-Currency IDR	Positive
Long-Term Local-Currency IDR	Positive

[Click here for the full list of ratings](#)

2035 Climate Vulnerability Signal: 54

Applicable Criteria

[Corporates Recovery Ratings and Instrument Ratings Criteria \(October 2023\)](#)

[Government-Related Entities Rating Criteria \(January 2024\)](#)

[Sector Navigators – Addendum to the Corporate Rating Criteria \(November 2023\)](#)

[Corporate Rating Criteria \(November 2023\)](#)

Related Research

[EMEA Medium-Sized Integrated Utilities – Relative Credit Analysis \(January 2024\)](#)

[EMEA Utilities Outlook 2024 \(November 2023\)](#)

[Central and Eastern European Integrated Utilities – Relative Credit Analysis \(March 2023\)](#)

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Limited Visibility of New Nuclear: Following Bulgarian government consent at end-2023, we expect BEH to start planning the construction of two new nuclear units under its subsidiary NPP Kozloduy-New Builds EAD. The main construction activities should start in 2029, with commissioning expected in 2034-2037. Fitch has not included this project in its rating case as there are no details of the corporate and financing structure yet, and the scheduled construction phase is beyond the forecast horizon. However, we assume elevated leverage when the construction phase starts and we deem it very important to understand the state's role in the project structure.

Criteria Update: The updated notching guideline under our new GRE Rating Criteria maintains the bottom-up approach for BEH. The total GRE support score is 25, compared with 17.5 previously, resulting in no change to the one-notch uplift for the IDR.

Responsibility to Support: Fitch assesses 'decision-making and oversight' as 'Very Strong' because the Bulgarian state is BEH's sole shareholder, approves its strategy and business plan and tightly controls BEH's operations. We view the Bulgarian government's 'precedents of support' as 'Strong', as it provided guarantees for about 5% of BEH's debt at end-2022 (expected to rise to around 10-15% in the forecast horizon under Fitch's rating case), preferential state loans (also for covering working capital needs), and regulatory support when needed.

Incentive to Support: We assess the 'preservation of government policy role' as 'Strong', as BEH has a crucial role in the security of gas supply in Bulgaria, implementing the state-government strategy aimed at diversifying gas supplies to Bulgaria through the execution of three major investments (including extension of the sole underground storage facility in Bulgaria, UGS Chiren, and the construction of the natural gas Interconnector between Bulgaria and Serbia).

BEH also runs the country's main energy infrastructure with significant development capex plans, and will play a key role in the national green energy transformation, also through the nuclear reactor construction. Fitch does not see a material contagion risk, as a default at BEH's level should not have material implications for the government's ability to issue new debt or its cost.

Financial Summary

(BGNm)	2020	2021	2022	2023E	2024F	2025F
EBITDA	930.1	2,755.8	4,579.0	2,249.7	1,354.3	1,903.7
FFO	967.3	2,922.5	4,080.8	1,995.5	1,120.3	1,575.5
FCF after acquisitions and divestitures	-666.6	966.8	2,291.2	-803.8	-827.1	637.4
FFO net leverage (x)	4.4	0.9	0.2	0.7	1.8	1.0
FFO interest coverage (x)	10.8	23.5	43.9	12.8	8.3	10.4

F – Forecast, E – Estimate
Source: Fitch Ratings, Fitch Solutions

Rating Derivation Relative to Peers

BEH has a leading position in the Bulgarian gas and electricity markets through its ownership of most of Bulgaria's power generation assets (including a nuclear power plant, lignite-fired and hydro power plants), the country's largest mining company, the country's electricity transmission network, gas transmission and transit networks and through its position as the public supplier of both electricity (until end-June 2024) and gas in Bulgaria.

BEH's integrated business structure and strategic position in the domestic market makes the group comparable with some of its Central European peers such as MVM Zrt. (MVM; BBB/Negative) and PGE Polska Grupa Energetyczna S.A. (PGE; BBB+/Stable). However, BEH is a negative outlier in the peer group in terms of corporate governance and has lower cash flow predictability, resulting from the higher merchant exposure of its generation assets. This is not mitigated through quasi-regulated capacity payments, as is the case for PGE, while regulated business has a lower weight on its results. The liberalisation of the Bulgarian energy market, combined with its coupling with neighbouring countries' energy markets, should improve transparency and limit any potential market interference.

BEH's rating includes a one-notch uplift from its SCP to reflect links with the sovereign, which is not the case for MVM or PGE.

Navigator Peer Comparison

	IDR/Outlook	Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility
Bulgarian Energy Holding EAD	BB+/Positive	bbb	bb-	bb+	bb+	bbb-	bbb-	bb+	bbb+	bb+
ENE A.S.	BBB/Stable	a-	bbb+	bbb+	bbb	bbb	bb	bbb	a	bbb-
Energa S.A.	BBB+/Stable	a-	bbb+	bbb+	bbb	bbb	bb	bbb-	bbb	bbb-
MVM Zrt.	BBB/Negative	bbb+	bbb	bbb	bbb	bbb	bbb+	bbb-	a-	bbb+
PGE Polska Grupa Energetyczna S.A.	BBB+/Stable	a-	a-	bbb	bbb	bbb+	bb	bbb	a	bbb+
TAURON Polska Energia S.A.	BBB-/Stable	a-	bbb+	bbb+	bbb	bbb	bb	bbb-	bbb	bbb

Source: Fitch Ratings. Relative Importance of Factor: Higher (Red), Moderate (Blue), Lower (Light Blue)

Name	IDR/Outlook	Operating Environment	Management and Corporate Governance	Revenue Visibility	Regulatory Environment	Market Position	Asset Base and Operations	Profitability and Cash Flow	Financial Structure	Financial Flexibility
Bulgarian Energy Holding EAD	BB+/Positive	+2	-2	0	0	+1	+1	0	+3	0
ENE A.S.	BBB/Stable	+2	+1	+1	0	0	-3	0	+3	-1
Energa S.A.	BBB+/Stable	+1	0	0	-1	-1	-4	-2	-1	-2
MVM Zrt.	BBB/Negative	+1	0	0	0	0	+1	-1	+2	+1
PGE Polska Grupa Energetyczna S.A.	BBB+/Stable	+1	+1	-1	-1	0	-4	-1	+2	0
TAURON Polska Energia S.A.	BBB-/Stable	+3	+2	+2	+1	+1	-2	0	+1	+1

Source: Fitch Ratings. Factor Score Relative to IDR: Worse positioned than IDR (Red), Within one notch of IDR (Blue), Better positioned than IDR (Light Blue)

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade:

- Stronger SCP due to FFO net leverage falling below 3.5x on a sustained basis, and supported by an internal corresponding leverage target, lower regulatory and political risk, higher earnings predictability, and better corporate governance
- Adequate visibility of the funding structure of the new nuclear power plant
- Further tangible government support to BEH, such as additional state guarantees materially increasing the share of state-guaranteed debt, or cash injections, which would more-tightly link BEH's credit profile with Bulgaria's stronger credit profile
- Upgrade of Bulgaria's IDR by two notches

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade:

- Weaker SCP, for example due to FFO net leverage exceeding 4.5x on a sustained basis, escalation of regulatory and political risk, or insufficient liquidity
- Weaker links with the Bulgarian state

Liquidity and Debt Structure

Healthy Liquidity: At end-June 2023, BEH had BGN3.6 billion of unrestricted cash and equivalents and BGN0.8 billion of Fitch-projected negative free cash flow) after acquisitions in the 12 months from July 2023. This compares with short-term debt maturities of BGN0.3 billion. The next large debt maturity is in June 2025, when a EUR600 million (BGN1.2 billion) bond matures.

Climate Vulnerability Considerations

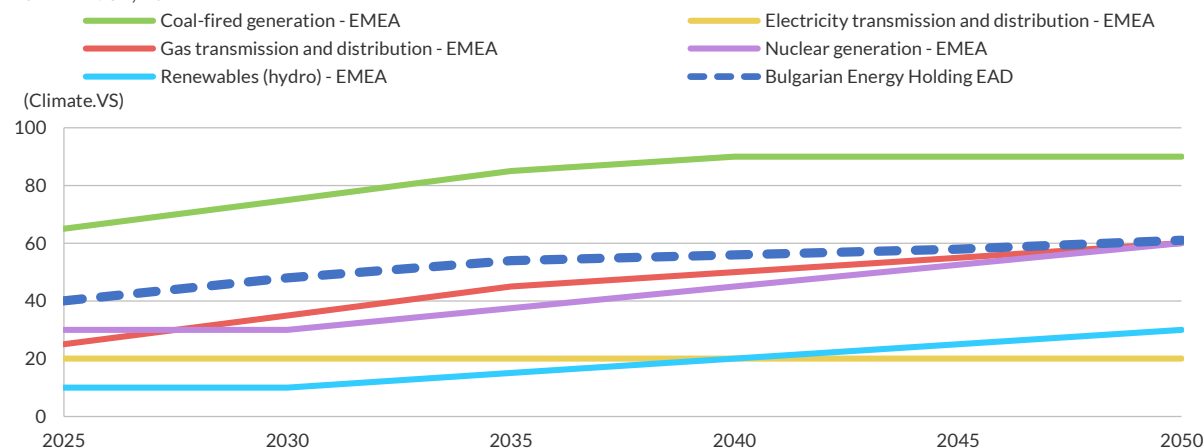
Fitch uses Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. Climate.VS range from 0 (lowest risk) to 100 (highest risk). For more information on Climate.VS, see Fitch's [Corporate Rating Criteria](#).

The FY22 EBITDA-weighted Climate.VS for BEH is 54, which is well above average in its peer group. BEH derived 20% of its EBITDA from its coal-fired generation assets. Key risks arise from EU policies designed to phase out coal usage and encourage alternative forms of electricity generation. We see BEH as the main tool of the Bulgarian government to enable decarbonisation of the Bulgarian energy market.

The Climate Neutrality Roadmap, adopted by National Assembly's decision of 6 October 2023 envisage that the lignite-fired power plants (1.6 GW out of 3.8 GW to be phased out by 2026) will be gradually replaced by renewable capacities and pumped-storage hydroelectric power plants, as well as development of nuclear capacities in order to balance the Bulgarian energy system. Following the Bulgarian government's decision, BEH has launch some preparatory work aimed at the construction of two new nuclear blocks, which will enable the phase out of BEH's lignite-fired plants and enable energy transition in Bulgaria.

Climate.VS Evolution

As of Dec. 31, 2022



Source: Fitch Ratings

Liquidity and Debt Maturities

Liquidity Analysis

(BGNm)	2023E	2024F	2025F	2026F
Available liquidity				
Beginning cash balance	4,255	3,146	2,003	324
Rating case FCF after acquisitions and divestitures	-804	-827	637	-41
Total available liquidity (A)	3,451	2,319	2,640	284
Liquidity uses				
Debt maturities	-304	-317	-2,316	-293
Total liquidity uses (B)	-304	-317	-2,316	-293
Liquidity calculation				
Ending cash balance (A+B)	3,146	2,003	324	-9
Revolver availability	–	–	–	–
Ending liquidity	3,146	2,003	324	-9
Liquidity score (x)	11.3	7.3	1.1	1.0

F – Forecast, E – Estimate

Source: Fitch Ratings, Fitch Solutions, Bulgarian Energy Holding EAD

Scheduled debt maturities

(BGNm)	31 Dec 22
2023	304
2024	317
2025	2,316
2026	293
2027	146
Thereafter	1,555
Total	4,930

Source: Fitch Ratings, Fitch Solutions, Bulgarian Energy Holding EAD

Key Assumptions

Fitch's key assumptions Within our Rating Case for the Issuer:

- Group EBITDA averaging BGN1.9 billion a year over 2023-2027
- Total capex of BGN4.8 billion over 2023-2027
- Dividends at 100% of net income during 2024-2027
- Price caps for electricity generators in place until end-2024

Financial Data

(BGNm)	2020	2021	2022	2023E	2024F	2025F
Summary income statement						
Gross revenue	4,462	9,302	21,913	11,249	7,524	10,576
Revenue growth (%)	-16.1	108.5	135.6	-48.7	-33.1	40.6
EBITDA before income from associates	930	2,756	4,579	2,250	1,354	1,904
EBITDA margin (%)	20.8	29.6	20.9	20.0	18.0	18.0
EBITDA after associates and minorities	939	2,767	4,593	2,250	1,354	1,904
EBITDAR	930	2,756	4,579	2,250	1,354	1,904
EBITDAR margin (%)	20.8	29.6	20.9	20.0	18.0	18.0
EBIT	303	2,036	3,750	1,349	445	980
EBIT margin (%)	6.8	21.9	17.1	12.0	5.9	9.3
Gross interest expense	-104	-129	-116	-164	-152	-167
Pretax income including associate income/loss	195	1,564	3,381	1,246	308	826
Summary balance sheet						
Readily available cash and equivalents	1,031	2,628	4,255	3,147	2,003	1,625
Debt	5,740	5,499	4,930	4,625	4,309	3,293
Lease-adjusted debt	5,740	5,499	4,930	4,625	4,309	3,293
Net debt	4,709	2,871	675	1,479	2,306	1,669
Summary cash flow statement						
EBITDA	930	2,756	4,579	2,250	1,354	1,904
Cash interest paid	-99	-130	-95	-164	-152	-167
Cash tax	-72	-181	-250	-151	-98	-175
Dividends received less dividends paid to minorities (inflow/outflow)	9	11	14	—	—	—
Other items before FFO	197	466	-168	—	—	—
FFO	967	2,923	4,081	1,996	1,120	1,576
FFO margin (%)	21.7	31.4	18.6	17.7	14.9	14.9
Change in working capital	-34	-247	-1,091	-369	358	228
CFO (Fitch-defined)	933	2,676	2,990	1,626	1,478	1,804
Total non-operating/nonrecurring cash flow	-6	-6	-1	—	—	—
Capex	-1,595	-1,700	-507	—	—	—
Capital intensity (capex/revenue) (%)	35.8	18.3	2.3	—	—	—
Common dividends	—	—	-191	—	—	—
FCF	-668	970	2,291	—	—	—
FCF margin (%)	-15.0	10.4	10.5	—	—	—
Net acquisitions and divestitures	1	-3	0	—	—	—
Other investing and financing cash flow items	-161	76	21	—	—	—
Net debt proceeds	651	555	-686	-304	-317	-1,016
Net equity proceeds	—	—	—	—	—	—
Total change in cash	-176	1,598	1,626	-1,108	-1,144	-378
Leverage ratios (x)						
EBITDA leverage	6.1	2.0	1.1	2.1	3.2	1.7
EBITDA net leverage	5.0	1.0	0.1	0.7	1.7	0.9
EBITDAR leverage	6.1	2.0	1.1	2.1	3.2	1.7
EBITDAR net leverage	5.0	1.0	0.1	0.7	1.7	0.9
FFO adjusted leverage	5.4	1.8	1.2	2.2	3.4	1.9
FFO adjusted net leverage	4.4	0.9	0.2	0.7	1.8	1.0
FFO leverage	5.4	1.8	1.2	2.2	3.4	1.9
FFO net leverage	4.4	0.9	0.2	0.7	1.8	1.0
Calculations for forecast publication						
Capex, dividends, acquisitions and other items before FCF	-1,600	-1,709	-698	-2,430	-2,306	-1,167
FCF after acquisitions and divestitures	-667	967	2,291	-804	-827	637
FCF margin after net acquisitions (%)	-14.9	10.4	10.5	-7.1	-11.0	6.0

(BGNm)	2020	2021	2022	2023E	2024F	2025F
Coverage ratios (x)						
FFO interest coverage	10.8	23.5	43.9	12.8	8.3	10.4
FFO fixed-charge coverage	10.8	23.5	43.9	12.8	8.3	10.4
EBITDAR fixed-charge coverage	9.5	21.4	48.2	13.7	8.9	11.4
EBITDAR net fixed-charge coverage	9.7	21.5	48.7	21.7	9.9	12.4
EBITDA interest coverage	9.5	21.4	48.2	13.7	8.9	11.4
Additional metrics (%)						
CFO-capex/debt	-11.5	17.7	50.4	13.7	6.2	25.7
CFO-capex/net debt	-14.1	34.0	367.8	43.0	11.6	50.8
CFO/capex	58.5	157.4	589.5	164.2	122.1	188.7

CFO – Cash flow from operations, F – Forecast, E – Estimate

Source: Fitch Ratings, Fitch Solutions

How to Interpret the Forecast Presented

The forecast presented above is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

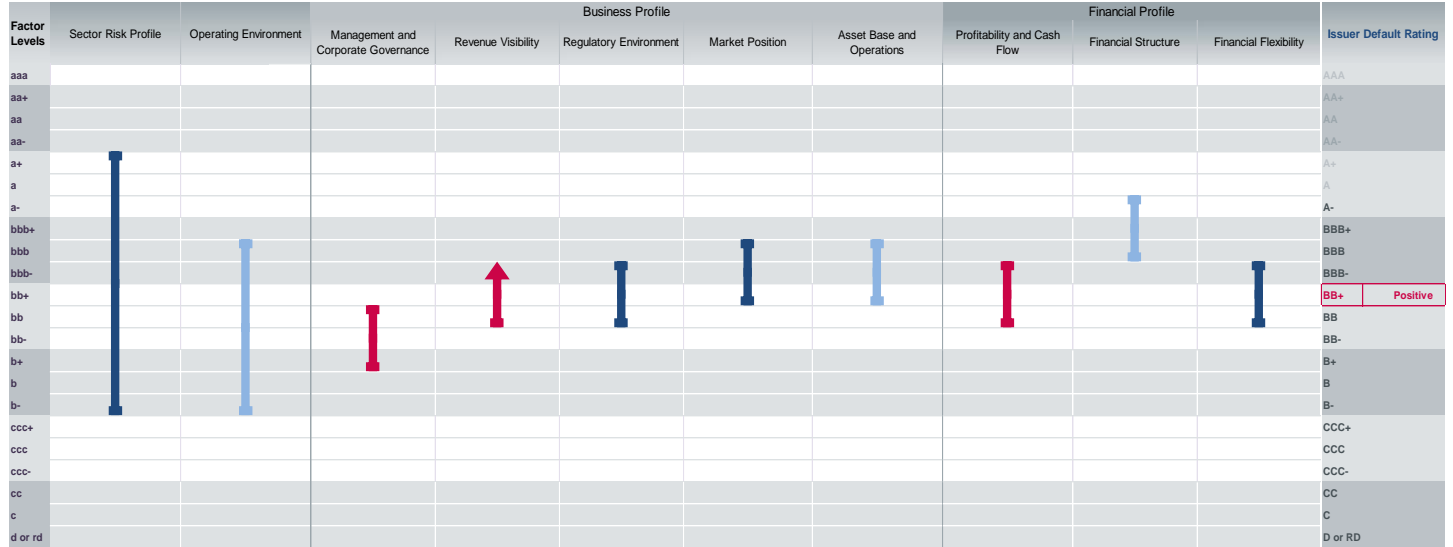
Ratings Navigator

FitchRatings

Bulgarian Energy Holding EAD

ESG Relevance:

Corporates Ratings Navigator
EMEA Utilities



Bar Chart Legend:	
Vertical Bars = Range of Rating Factor	Bar Arrows = Rating Factor Outlook
Bar Colors = Relative Importance	<ul style="list-style-type: none"> ↑ Positive ↓ Negative ↕ Evolving □ Stable
<ul style="list-style-type: none"> ■ Higher Importance ■ Average Importance ■ Lower Importance 	

Operating Environment			Management and Corporate Governance				
bbb+	Economic Environment	bbb	Average combination of countries where economic value is created and where assets are located.	bb+	Management Strategy	bb	Strategy generally coherent but some evidence of weak implementation.
bbb	Financial Access	bbb	Average combination of issuer-specific funding characteristics and the strength of the relevant local financial market.	bb	Governance Structure	bb	Board effectiveness questionable, with few independent directors. "Key Person" risk from dominant CEO or shareholder.
b-	Systemic Governance	bbb	Systemic governance (eg rule of law, corruption, government effectiveness) of the issuer's country of incorporation consistent with 'bbb'.	bb-	Group Structure	bb	Complex group structure or non-transparent ownership structure. Related-party transactions exist but with reasonable economic rationale.
ccc+				b+	Financial Transparency	b	Defective financial reporting. Aggressive accounting policies.
				b			
Revenue Visibility			Regulatory Environment				
bbb	Size and Integration	bbb	Top-tier position in at least one market. Partially integrated (typically including generation, distribution and supply).	bbb	Regulatory Framework and Policy Risk	bb	Opaque or overly demanding frameworks with limited track record, short-term tariffs; significant political risk.
bbb-	Earnings from Regulated Network Assets	bbb	Less than 40% of EBITDA comes from high-quality regulated network assets.	bbb-	Cost Recovery and Risk Exposure	bbb	Tariff setting that may limit efficiently incurred cost and investment recovery, with moderate regulatory lag, price and volume risk.
bb+	Quasi-Regulated Earnings	bb	Less than 10% of EBITDA comes from quasi-regulated assets or from long-term contracted sales with creditworthy counterparties.	bb+			
bb				bb			
bb-				bb-			
Market Position			Asset Base and Operations				
bbb+	Fundamental Market Trends	bbb	Markets with emerging structural challenges.	bbb+	Asset Quality	bbb	Mid-range asset quality not likely to affect opex and capex requirements compared with peers.
bbb	Generation and Supply Positioning	a	Strong position in the merit order; effective hedging; flexible fuel procurement. Generation balanced with strong position in supply and services.	bbb	Asset Diversity	bb	Limited diversification by geography, generation source, supplied product.
bbb-	Customer Base and Counterparty Risk	bb	Structurally challenged economy in area served; high counterparty risk; supply operations with high doubtful debt levels.	bbb-	Carbon Exposure	bbb	Energy production balanced between clean and thermal sources; medium carbon exposure (< 450gCO2/kWh).
bb+				bb+			
bb				bb			
Profitability and Cash Flow			Financial Structure				
bbb	Free Cashflow	bb	Structurally negative FCF across the investment cycle.	a	FFO Leverage	a	3.5x
bbb-	Volatility of Profitability	bb	Lower stability and predictability of profits than utility peers.	a-	FFO Net Leverage	a	3.0x
bb+				bbb+			
bb				bbb			
bb-				bbb-			
Financial Flexibility			Credit-Relevant ESG Derivation				
bbb	Financial Discipline	bb	Financial policies in place but flexibility in applying them could lead to temporarily exceeding downgrade guidelines.	<p>Bulgarian Energy Holding EAD has 2 ESG rating drivers and 10 ESG potential rating drivers</p> <ul style="list-style-type: none"> Complexity, transparency and related-party transactions Quality and timing of financial disclosure Emissions from operations Fuel use to generate energy Impact of waste from operations Plants' and networks' exposure to extreme weather <p>Showing top 6 issues For further details on Credit-Relevant ESG scoring, see page 3.</p>			
bbb-	Liquidity	bbb	One-year liquidity ratio above 1.25x. Well-spread debt maturity schedule but funding may be less diversified.				
bb+	FFO Interest Coverage	a	5.5x				
bb	FX Exposure	bb	FX exposure on profitability and/or debt/cash flow match. Some hedging but only partly effective.				
bb-							
				key driver	0	issues	5
				driver	2	issues	4
				potential driver	10	issues	3
				not a rating driver	2	issues	2
					0	issues	1

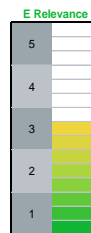
How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Credit-Relevant ESG Derivation

				ESG Relevance to Credit Rating	
Bulgarian Energy Holding EAD has 2 ESG rating drivers and 10 ESG potential rating drivers					
key driver	0	issues	5		
driver	2	issues	4		
potential driver	10	issues	3		
not a rating driver	2	issues	2		
	0	issues	1		

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference
GHG Emissions & Air Quality	3	Emissions from operations	Asset Base and Operations; Profitability and Cash Flow
Energy Management	3	Fuel use to generate energy	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow
Water & Wastewater Management	2	Water used by hydro plants or by other generation plants; effluent management	Asset Base and Operations; Market Trends and Risks; Profitability and Cash Flow
Waste & Hazardous Materials Management; Ecological Impacts	3	Impact of waste from operations	Asset Base and Operations; Profitability and Cash Flow
Exposure to Environmental Impacts	3	Plants' and networks' exposure to extreme weather	Asset Base and Operations; Profitability and Cash Flow



How to Read This Page

ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.

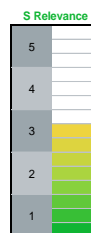
The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.

The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to reflect a negative impact unless indicated with a '+' sign for positive impact.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

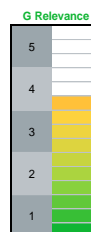
Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference
Human Rights, Community Relations, Access & Affordability	3	Product affordability and access	Profitability and Cash Flow; Regulation
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Quality and safety of products and services; data security	Profitability and Cash Flow
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction	Profitability and Cash Flow; Financial Structure; Financial Flexibility
Employee Wellbeing	2	Worker safety and accident prevention	Profitability and Cash Flow; Financial Structure; Financial Flexibility
Exposure to Social Impacts	3	Social resistance to major projects that leads to delays and cost increases	Asset Base and Operations; Profitability and Cash Flow



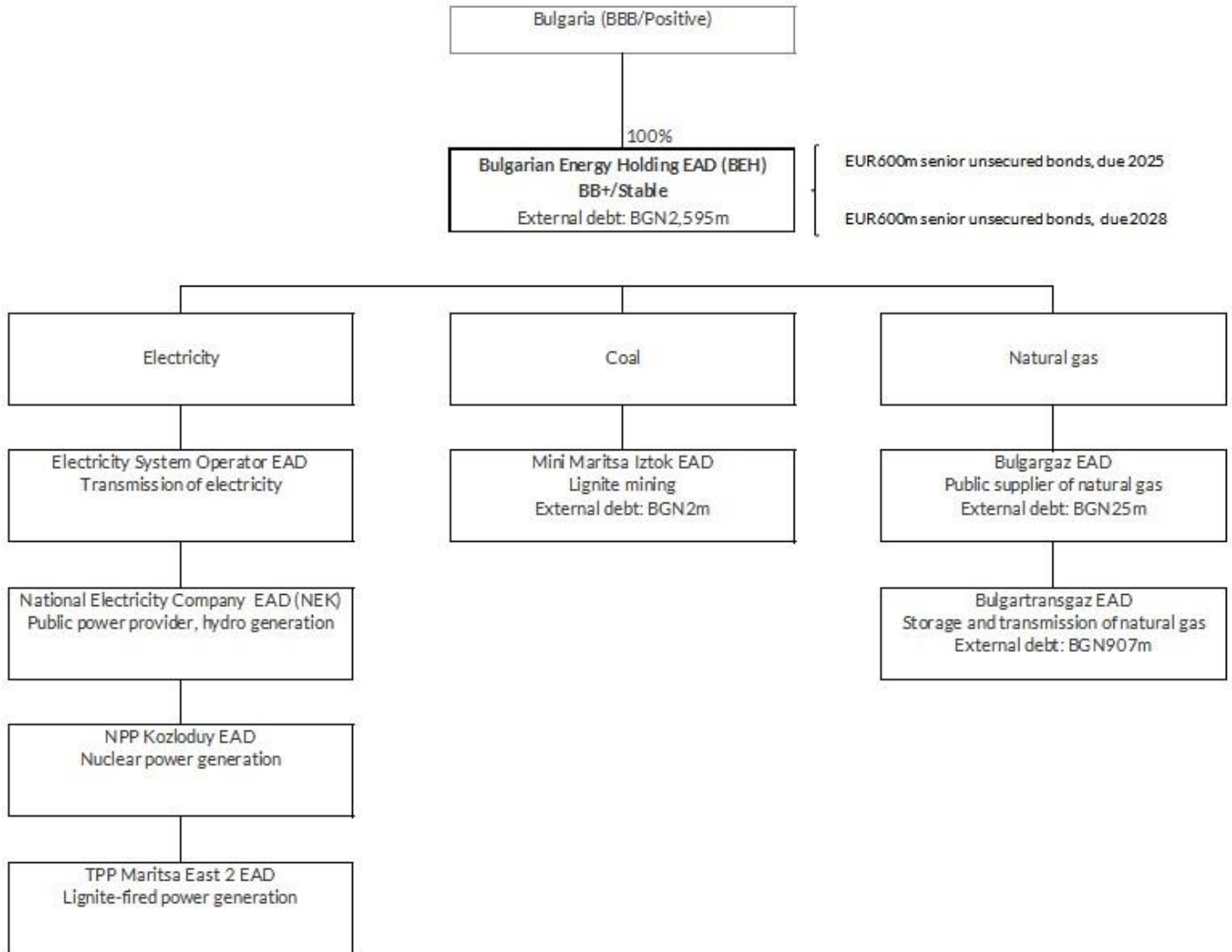
Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance
Group Structure	4	Complexity, transparency and related-party transactions	Management and Corporate Governance
Financial Transparency	4	Quality and timing of financial disclosure	Management and Corporate Governance



CREDIT-RELEVANT ESG SCALE	
How relevant are E, S and G issues to the overall credit rating?	
5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Inrelevant to the entity rating but relevant to the sector.
1	Inrelevant to the entity rating and irrelevant to the sector.

Simplified Group Structure Diagram



Source: Fitch Ratings, Fitch Solutions, Bulgarian Energy Holding EAD, as at end-December 2023

Peer Financial Summary

Company	Issuer Default Rating	Financial statement date	EBITDA (EURm)	FFO (EURm)	FCF (EURm)	FFO interest coverage (x)	FFO net leverage (x)
Bulgarian Energy Holding EAD	BB+						
	BB	2022	2,341	2,086	1,171	43.9	0.2
	BB	2021	1,411	1,496	497	23.5	0.9
	BB	2020	480	499	-344	10.8	4.4
ENEA S.A.	BBB						
	BBB	2022	475	365	-338	11.3	2.0
	BBB	2021	781	613	730	19.8	1.0
Energa S.A.	BBB	2020	729	574	104	10.8	2.3
	BBB+						
	BBB+	2022	525	246	-296	5.0	3.6
MVM Zrt.	BBB+	2021	506	360	156	11.2	2.3
	BBB-	2020	432	375	-18	7.0	2.7
	BBB						
PGE Polska Grupa Energetyczna S.A.	BBB	2022	801	934	-3,367	8.8	2.5
	BBB	2021	683	514	1,089	20.6	-0.6
		2020	544	448	316	28.1	1.7
	BBB+						
TAURON Polska Energia S.A.	BBB+	2022	1,490	1,325	962	18.8	-0.6
	BBB+	2021	1,725	1,618	505	24.4	0.4
	BBB+	2020	1,346	1,149	865	16.5	1.2
TAURON Polska Energia S.A.	BBB-						
	BBB-	2022	779	572	-358	6.1	4.4
	BBB-	2021	911	719	277	10.4	3.0
	BBB-	2020	840	821	-45	10.7	3.1

Source: Fitch Ratings, Fitch Solutions

Fitch Adjusted Financials

(BGNm as of 31 December 2022)	Notes and formulas	Standardised values	Other adjustments	Sum of adjustments	Lease treatment	Other adjustments	Adjusted values
Income statement summary							
Revenue		21,913	–		–	–	21,913
EBITDA	(a)	4,206	–		-1	374	4,579
Depreciation and amortization		-830	–		1	-0	-829
EBIT		3,376	–		-0	374	3,750
Balance sheet summary							
Debt	(b)	3,664	–		-2	1,267	4,930
Of which other off-balance-sheet debt		–	–		–	–	–
Lease-equivalent debt		–	–		–	–	–
Lease-adjusted debt		3,664	–		-2	1,267	4,930
Readily available cash and equivalents	(c)	3,898	–		–	356	4,255
Not readily available cash and equivalents		355	–		–	–	355
Cash flow summary							
EBITDA	(a)	4,206	–		-1	374	4,579
Dividends received from associates less dividends paid to minorities	(d)	14	–		–	–	14
Interest paid	(e)	-95	–		0	0	-95
Interest received	(f)	1	–		–	–	1
Preferred dividends paid	(g)	–	–		–	–	–
Cash tax paid		-250	–		–	–	-250
Other items before FFO		206	–		0	-374	-168
FFO	(h)	4,082	–		-1	0	4,081
Change in working capital		-1,091	–		–	–	-1,091
CFO	(i)	2,990	–		-1	0	2,990
Non-operating/nonrecurring cash flow		-1	–		–	–	-1
Capex	(j)	-507	–		–	–	-507
Common dividends paid		-191	–		–	–	-191
FCF		2,292	–		-1	0	2,291
Gross leverage (x)							
FFO leverage	b/(h-e-f-g)	0.9	–		–	–	1.2
(CFO-capex)/debt (%)	(i+j)/b	67.8	–		–	–	50.4
Net leverage (x)							
FFO net leverage	(b-c)/(h-e-f-g)	-0.1	–		–	–	0.2
(CFO-capex)/net debt (%)	(i+j)/(b-c)	-1,059.4	–		–	–	367.8
Coverage (x)							
FFO interest coverage	(h-e-f-g)/(-e-g)	43.8	–		–	–	43.9

CFO – Cash flow from operations

Note: The standardised items presented above are based on Fitch's taxonomy for the given sector and region.

Reported items may not match the Fitch taxonomy, but they are captured into corresponding lines accordingly.

Debt includes other off-balance-sheet debt.

Source: Fitch Ratings, Fitch Solutions, Bulgarian Energy Holding EAD

Government Related Entity Analysis

Bulgarian Energy Holding EAD Rating Derivation Summary

GRE Key Risk Factors and Support Score

Responsibility to support	15.0
Decision-making and oversight	Very Strong
Precedents of support	Strong
Incentives to support	10.0
Preservation of provision of public service or sovereignty or strategic assets	Strong
Contagion risk	Not Strong Enough
Support score	25.0
Summary	
Supporting government	Bulgaria
Government LT IDR	BBB
GRE SCP	bb
Support category	Strong Expectations
Notching expression	+1
Single equalisation factor	No
GRE LT IDR	BB+
LT IDR - Long-Term Issuer Default Rating.	
GRE - Government-related entity. SCP - Standalone Credit Profile. n.a. - Not applicable. Source: Fitch Ratings	

Government LT IDR	GRE SCP	GRE LT IDR
AAA	aaa	AAA
AA+	aa+	AA+
AA	aa	AA
AA-	aa-	AA-
A+	a+	A+
A	a	A
A-	a-	A-
BBB+	bbb+	BBB+
BBB	bbb	BBB
BBB-	bbb-	BBB-
BB+	bb+	BB+
BB	bb	BB
BB-	bb-	BB-
B+	b+	B+
B	b	B
B-	b-	B-
CCC+	ccc+	CCC+
CCC	ccc	CCC
CCC-	ccc-	CCC-
CC	cc	CC
C	c	C
RD	rd	RD
D	d	D

Source: Fitch Ratings

Notching Guideline

	A	B	C	D	E	F	G
GRE's SCP - Government's IDR	Equal to or more than 45.0	Between 42.5 and 35.0 ^a	Between 32.5 and 30.0 ^a	Between 25.0 and 20.0 ^a	15.0 ^a	12.5	Equal to or less than 10.0
>0	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained	Standalone or constrained
0	0	0	0	Standalone	Standalone	Standalone	Standalone
-1	0	0	0	+1 ^b	Standalone	Standalone	Standalone
-2	0	0	0	+1	Standalone	Standalone	Standalone
-3	0	0	-1	+1	Standalone	Standalone	Standalone
-4	0	-1	-2	+1	Standalone	Standalone	Standalone
-5	0	-1	-2	+2	+1	Standalone	Standalone
-6	0	-1	-2	+3	+2	+1	Standalone
-7	0	-1	-2	+4	+2	+1	Standalone
-8	0	-1	-2	+4	+3	+1	Standalone
-9	0	-1	-2	+5	+3	+1	Standalone
-10	0	-2	-3	+5	+3	+1	Standalone
-11	-1	-2	-4	+5	+3	+1	Standalone
-12	-1	-3	-4	+5	+3	+1	Standalone
-13	-2	-3	-5	+5	+3	+1	Standalone
-14	-2	-3	-5	+5	+3	+1	Standalone
-15	-2	-3	-5	+5	+3	+1	Standalone
No SCP	0	-1	-2	-3	n.a	n.a	n.a

^a Including those values. ^b Capped at government IDR minus one if the credit drivers of the GRE are largely similar to or interrelated with those of the government (typical for policy GREs). Note: Columns A to C refer to notching down from the government IDR and columns D to F refer to notching up from the Standalone Credit Profile. See Fitch's *Government-Related Entities Rating Criteria* for more information. GRE - Government-related entity, SCP - Standalone Credit Profile, LT IDR - Long-Term Issuer Default Rating, n.a. - Not applicable.
Source: Fitch Ratings

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